

Patent Abstracts of Japan

PUBLICATION NUMBER : 61207461  
PUBLICATION DATE : 13-09-86

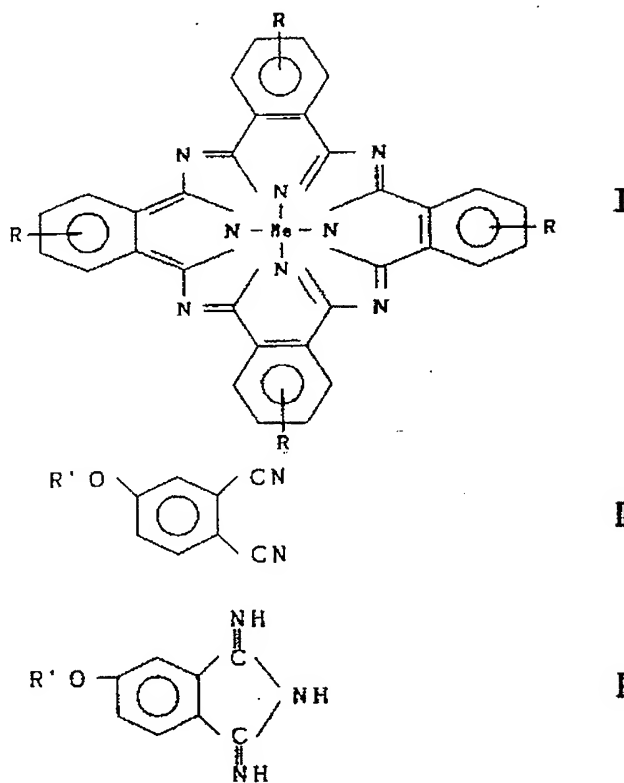
APPLICATION DATE : 09-03-85  
APPLICATION NUMBER : 60047297

APPLICANT : RIKAGAKU KENKYUSHO;

INVENTOR : OSADA YOSHIHITO;

INT.CL. : C08L 71/00 C08K 3/00 H01L 21/208  
H01L 29/28 H01L 29/91 H01L 31/04  
H01L 49/00 // C08G 65/00 H01L 29/78

TITLE : POLYMERIZED PHTHALOCYANINE  
DERIVATIVE CONTAINING DOPING  
AGENT AND MSM OR MIS ELEMENT  
CONTAINING SAME AS  
SEMICONDUCTIVE LAYER



ABSTRACT : PURPOSE: To provide a phthalocyanine polymer which has excellent semicon ducting characteristics and gives MSM or MIS element having excellent rectifica tion characteristics, by irradiating a vapor mixture of a phthalocyanine deriva tive and a doping agent with high-frequency radiation.

CONSTITUTION: A phthalocyanine derivative of formula I (wherein R is H, halogen, 5C or lower alkoxy; Me is H<sub>2</sub>, Mg, transition metal) is mixture with a doping agent selected from iodine, SO<sub>3</sub>, AsF<sub>5</sub>, BF<sub>3</sub>, SbF<sub>5</sub>, NbF<sub>5</sub>, TaF<sub>5</sub> and PF<sub>5</sub>. The vapor of the mixture is irradiated with high-frequency radiation to obtain the desired polymerized phthalocyanine derivative. The phthalocyanine derivative of formula I can be synthesized by reacting a 4-alkoxyphthalonitrile of formula II with ammonia and subjecting the resulting diiminoisoindoline intermediate to a ring closure condensation reaction.

COPYRIGHT: (C)1986,JPO&Japio